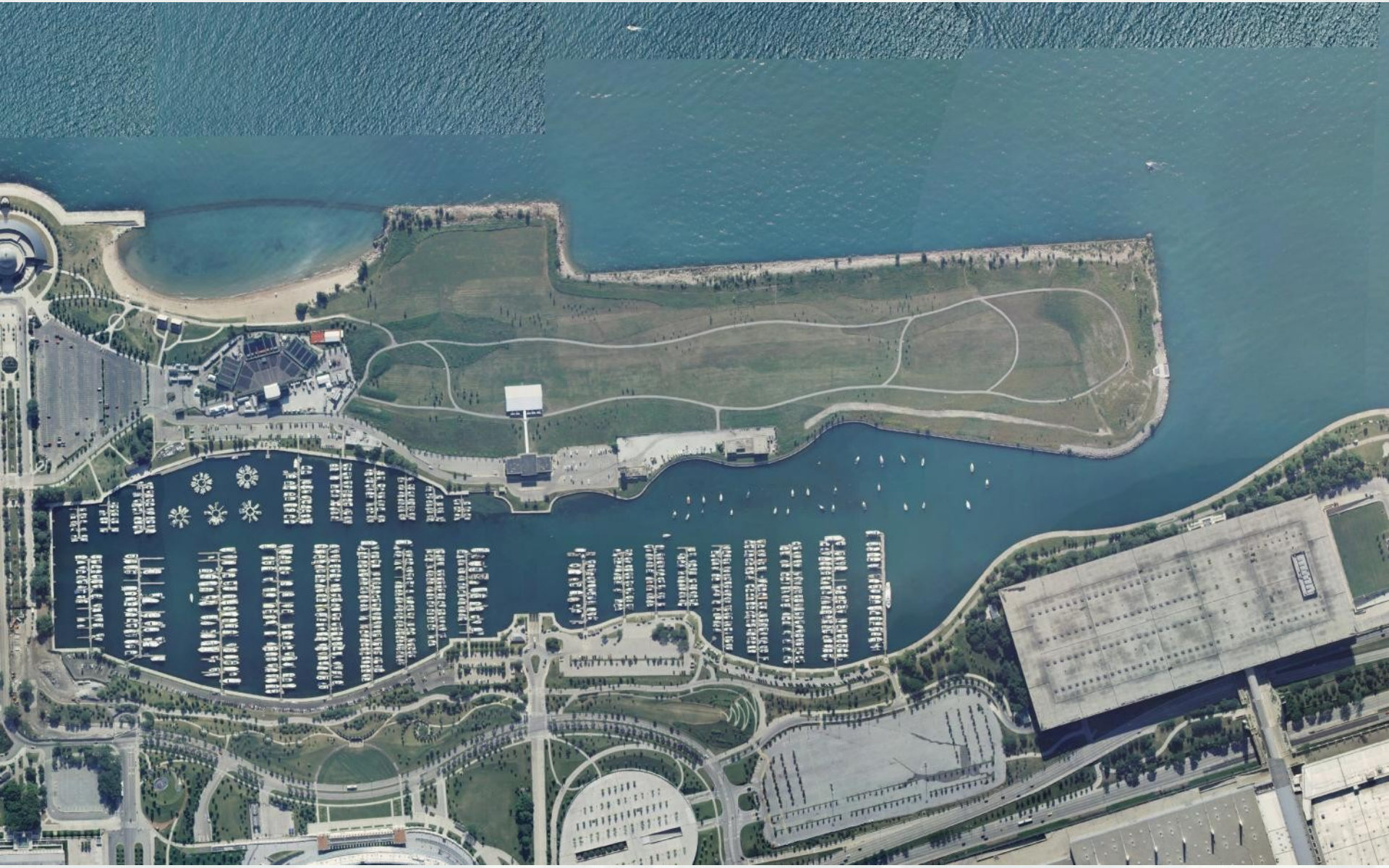
# Northerly Island

**Bob Foster**

**Senior Project Manager**

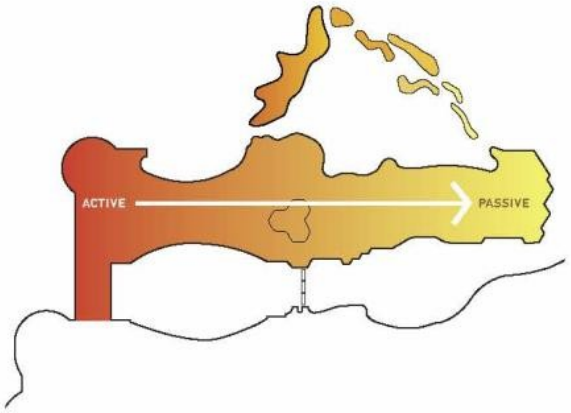
**Chicago Park District**

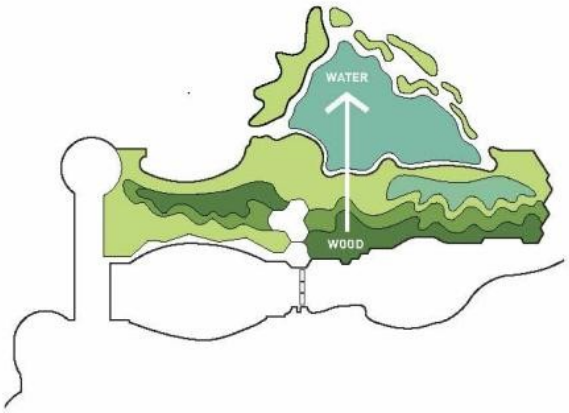
**June 26, 2012**



02 SITE STRATEGY

# ORGANIZATIONAL PRINCIPLES




### EXPERIENCING THE ISLAND

The existing connection to Northerly Island from Solidarity Drive will be maintained as the primary access to the park. The north end of the island will be programmed to take advantage of the high number of people arriving from this direction. As visitors move from north to south, they experience the island's gradual transition from a place of lively entertainment on a larger-group scale, to the diverse ecology toward the island's tip that fosters quieter, more focused individual experiences.

### HABITATS PARALLEL TO THE COASTLINE

The ecological zones on the island are organized in linear bands parallel to the coastline. This is representative of natural organization along the coast of Lake Michigan. A dense woodland on the west transitions to an open savannah, grassland prairie, emergent marsh, to lagoon and open lake water to the east.

SITE PLAN
N
0 100 200 400 800 FT

## FORMING REEF AND LAGOON

Topography has played a key role in shaping the identity of Northerly Island over the last hundred years. Historic underwater topographic maps reveal deep pits where land was dredged in the early 1920s to construct the island. Other sources of fill to build up the land were not quite as local—these include building demolition debris and materials diverted from landfills.

Topography will continue to play a key role in shaping visitors' experiences and creating healthy ecologies at Northerly Island Park.

A network of ridges dotted with peaks and valleys runs along the southwest edge of the island into Lake Michigan where they become the Northerly Reef, forming and protecting the Lagoon. This elevated loop connects land and water activities and ecologies, thereby defining a new way of engaging the lake.

Construction of these protective ridges will be composed of inexpensive shot rock, generally obtained for the 'first blast' at a quarry. This type of stone is available in suitable quantities and is less expensive than other types of fill material. The rock will be placed in several layers of different sized stone. Larger stones will be used on the outside of the reef where they will protect the reef against the Lake Michigan's powerful waves. Different sizes stones at the inner lagoon will be selected based on needs of spawning fish and surface vegetation.

A less identifiable, but not less important, benefit of the ridge network is the visual and acoustic buffer it provides. Visitors to Northerly will be able to stand on the edge of the wetland and lose all sense of the city beyond. A short hike up the forested ridge will reveal views of Chicago's skyline and a bustling harbor nearby.

# Northerly Island Great Lakes Fishery and Ecosystem Restoration (GLFER) Project

**Kirston Buczak, PMP**
**USACE, Chicago District**
**June 26, 2012**

**US Army Corps of Engineers**
**BUILDING STRONG®**

# Outline

- Background
- Proposed Project Features
- Status and Next Steps

# Background

- 42 U.S.C. § 1962d-22.Great Lakes Fishery and Ecosystem Restoration (GLFER) Section 506 of Water Resources and Development Act (WRDA) 2000
- Section 506 provides the authority to plan, design, and construct projects that support the restoration of fisheries, ecosystems, and beneficial uses of the Great Lakes
- Cost share is 65% federal and 35% non-federal
- Local sponsor's share can be any combination of cash, and/or land and work in kind credits
- Projects are justified based on ecosystem benefits

# Background

- No recreation features allowed under the GLFER authority
- Project limit is $10M federal funds (Total $15M)
- Phases:  Feasibility, and Design and Implementation (DI)
- Feasibility phase includes preparing a Feasibility Report and Environmental Assessment (EA)
- DI phase includes signing a Project Partnership Agreement (PPA), preparing plans and specifications (P&S), contract award, construction and oversight
- Great Lakes Restoration Initiative (GLRI) funds

# Proposed Project Features

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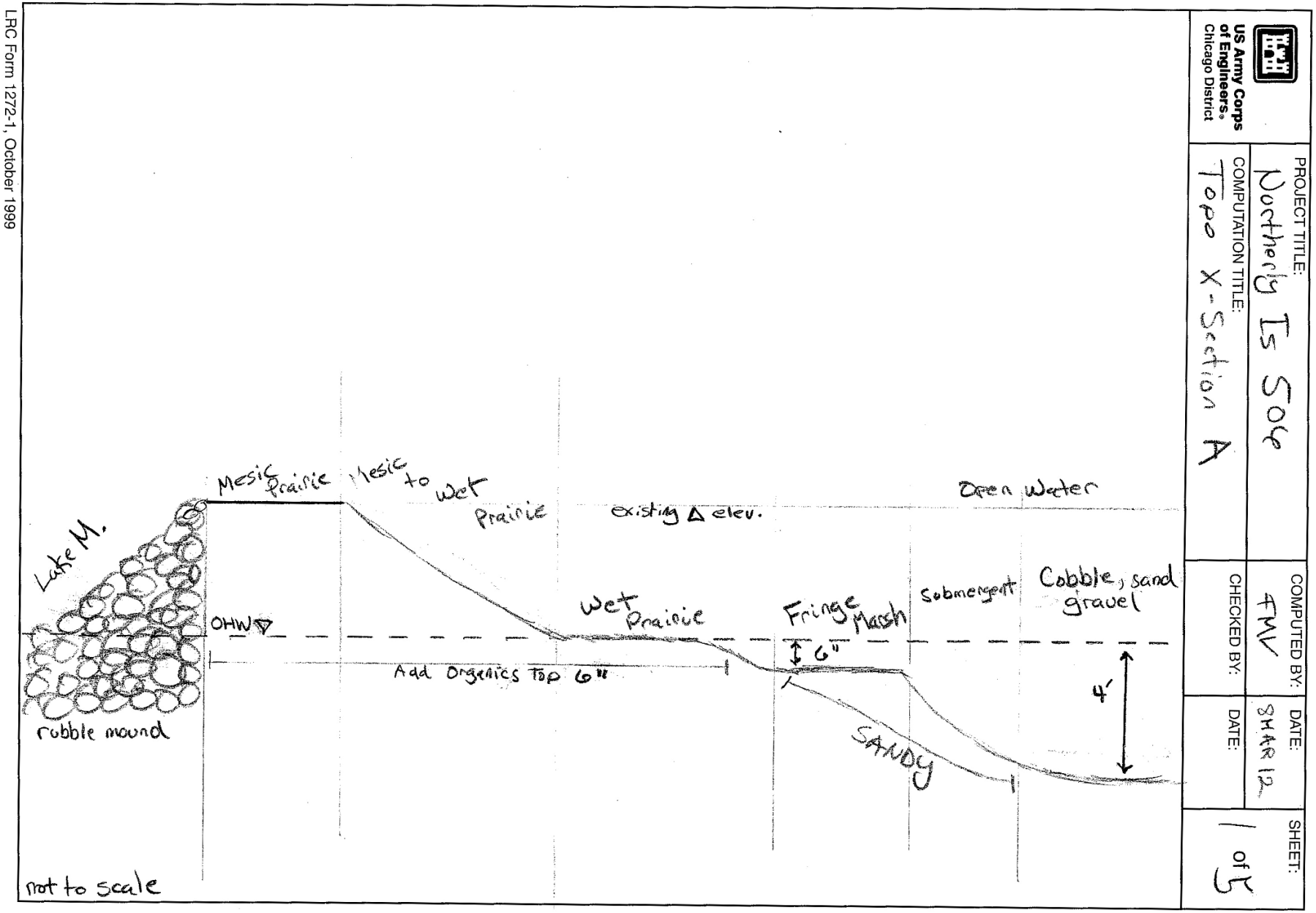
- **Lacustrine** - This type would be enhanced to provide both lithophilic (stone loving) spawners and those fish species that spawn on submerged vegetation

# Proposed Project Features

- **Pond** – would be approximately 4.1-acres with depths to 4’. Bottom substrate would be sand, gravel, cobble, and boulders. Interstitial spacing provided by cobble and boulders to provide habitat for macroinvertebrates. Large flat slate rocks would promote establishment of *Necturus maculosus* (mudpuppy). The connection to Lake Michigan would block large invasive species such as *Cyprinus carpio* (common carp) and non-native Salmonids

Unclassified//FOUO




LRC Form 1272-1, October 1999

# Proposed Project Features

- **Emergent Marsh** – This type would be restored to provide aquatic emergent habitat for fish, insects, amphibians and birds.

# Proposed Project Features

- **Wet Prairie** – This type would be restored to provide aquatic prairie habitat for crayfish, insects, amphibians, reptiles, birds and

# Proposed Project Features

- **Mesic Prairie** – This type would be restored to provide prairie habitat for insects, amphibians, reptiles, birds and small

Unclassified//FOUO

# Proposed Project Features

- **Savanna** – This type would be restored to provide black oak savanna habitat for insects, amphibians, reptiles, birds and small

# Status and Next Steps

- Received approval to initiate the feasibility study in February 2012
- Preparing feasibility report and EA
  - Sent EA out for 30-day public review (June 7, 2012)
  - Respond to public comments received (anticipated July 7)
  - Sign Finding of No Significant Impacts (FONSI)
- Submit draft feasibility report and EA for project approval (anticipated in July 2012)
- Project approval anticipated in July 2012
- Sign PPA July/Aug 2012
- Construction contract award September 2012